

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A vehicle navigation method comprising:

initiating a trip request, including trip request information;

determining vehicle coordinates;

sending vehicle coordinates and the entered trip request information to a server over a network;

generating a trip plan according to navigation information stored in a memory associated with the server, the vehicle coordinates, and the trip request information, wherein the generated trip plan includes a table of locations of the trip plan with associated navigation prompts;

sending the generated trip plan table to the vehicle over the network;

comparing present vehicle coordinates to the trip plan table; and

if, according to the comparison, the vehicle coordinates are within a threshold value from a location in the table, presenting the navigation prompt associated with the location in the table that is within the threshold value of the vehicle's location.

2. The method of claim 1, wherein trip request information includes voice instructions.

3. The method of claim 2, wherein generating comprises determining a destination by interpreting the trip voice instructions by performing voice recognition processing.

4. The method of claim 1, wherein the navigation prompts include voice prompts.

5. The method of claim 1, further comprising determining if the vehicle is adhering to the trip plan, wherein determining adherence comprises:

determining distance of the vehicle coordinates to the trip plan; and

if the vehicle coordinates are not within a threshold value from the trip plan, sending present vehicle coordinates to the server, generating a new trip plan and trip plan table based on the sent present vehicle coordinates, and sending the new trip plan table to the vehicle.

6. A vehicle navigation method comprising:

initiating a trip request;

entering trip voice instructions;
determining vehicle coordinates;
sending vehicle coordinates and the entered voice instructions to a server over a
network;
5 generating a trip plan according to navigation information stored in a memory
associated with the server, the vehicle coordinates, and the trip voice
instructions, wherein the generated trip plan includes a table of locations of
the trip plan with associated voice prompts;
sending the generated trip plan table to the vehicle over the network;
10 comparing present vehicle coordinates to the trip plan table; and
if, according to the comparison, the vehicle coordinates are within a threshold
value from a location in the table, presenting the voice prompt associated with
the location in the table that is within the threshold value of the vehicle's
location.

15 7. The method of claim 6, wherein generating comprises determining a destination by
interpreting the trip voice instructions by performing voice recognition processing.

8. The method of claim 6, further comprising determining if the vehicle is adhering to
the trip plan, wherein determining adherence comprises:

determining the distance of the vehicle coordinates to a trip plan location; and
20 if the vehicle coordinates are not within a threshold value from the trip plan
location, sending present vehicle coordinates to the server, generating a new
trip plan and trip plan table based on the sent present vehicle coordinates, and
sending the new trip plan table to the vehicle.

9. A vehicle navigation method comprising:

25 initiating a trip request;
entering trip voice instructions;
determining vehicle coordinates;
sending vehicle coordinates and the entered voice instructions to a server over a
network;

30 generating a trip plan according to navigation information stored in a memory
associated with the server, the vehicle coordinates, and the trip voice
instructions, wherein the generated trip plan includes a table of locations of
the trip plan with associated one or more identifiers;

5 sending the generated trip plan table to the vehicle over the network;
comparing present vehicle coordinates to the trip plan table;
if, according to the comparison, the present vehicle coordinates are within a
threshold value from a location in the table, retrieving one or more voice
prompts previously stored at the vehicle, wherein the one or more retrieved
voice prompts correspond to the one or more identifiers associated with the
location in the table within the threshold value from the present vehicle
coordinates; and
presenting the retrieved one or more voice prompts.

10 10. The method of claim 9, wherein:
retrieving comprises when a voice prompt is not previously stored at the vehicle,
sending a request to the server for the non-stored voice prompt and sending
the non-stored voice prompt from the server to the vehicle; and
presenting comprises presenting the sent voice prompt.

15 11. The method of claim 10, wherein retrieving further comprises saving the sent voice
prompt according to the corresponding identifier.

12. The method of claim 9, further comprising purging saved voice prompts according
to a scheduled purge request.

20 13. The method of claim 9, further comprising purging saved voice prompts according
to a user purge request.

14. The method of claim 9, further comprising purging saved voice prompts according
to a server generated purge request.

25 15. A vehicle navigation method comprising:
initiating a trip request;
entering trip voice instructions;
determining vehicle coordinates;
sending vehicle coordinates and the entered voice instructions to a server over a
network;
30 generating a trip plan according to vehicle navigation information stored in a
memory associated with the server, the vehicle coordinates, and the trip voice
instructions, wherein the generated trip plan includes a table of locations of

the trip plan and each location entry in the table includes an associated voice prompt;

comparing present vehicle coordinates to the trip plan table; and

if, according to the comparison, the vehicle coordinates are within a threshold value from a location in the table, retrieving at least one of a voice prompt or voice prompt tag identifier, sending the retrieved at least one of a voice prompt or voice prompt tag identifier to the vehicle, and presenting the sent voice prompt or a previously stored voice prompt associated with the sent voice prompt tag identifier.

10 16. A vehicle navigation system comprising:

a computer-based vehicle unit located in a vehicle for receiving and transmitting trip request information and receiving trip plan navigation information, the computer-based vehicle unit having a processor and associated memory, a user interface, a global positioning system for determining vehicle coordinates, and a radio unit;

a network configured to wirelessly send and receive trip request information to and from the vehicle unit via the radio unit; and

a computer-based server in communication with the network for receiving trip request information from the computer-based vehicle unit, generating a trip plan according to navigation information stored in a memory associated with the server and the trip request information, and sending the generated trip plan to the vehicle unit over the network.

17. The system of claim 16, wherein the generated trip plan includes a table of locations of the trip plan with associated navigation prompts.

25 18. The system of claim 17, wherein:

the computer-based vehicle unit compares present vehicle coordinates to the trip plan table; and

if, according to the comparison, the vehicle coordinates are within a threshold value from a location in the table, the vehicle unit presents the navigation prompt associated with the location in the table that is within the threshold value of the vehicle's location.

19. A vehicle navigation apparatus comprising:

means for initiating a trip request;

means for entering trip voice instructions;
means for determining vehicle coordinates;
means for sending vehicle coordinates and the entered voice instructions to a
server over a network;

5 means for generating a trip plan according to vehicle navigation information
stored in a memory associated with the server, the vehicle coordinates, and the
trip voice instructions, wherein the generated trip plan includes a table of
locations of the trip plan and each location entry in the table includes an
associated voice prompt;

10 means for comparing present vehicle coordinates to the trip plan table; and
if, according to the comparison, the vehicle coordinates are within a threshold
value from a location in the table, means for retrieving at least one of a voice
prompt or voice prompt tag identifier, means for sending the retrieved at least
one of a voice prompt or voice prompt tag identifier to the vehicle, and means
15 for presenting the sent voice prompt or a previously stored voice prompt
associated with the sent voice prompt tag identifier.

20. A vehicle navigation apparatus comprising:

means for initiating a trip request;
means for entering trip voice instructions;
20 means for determining vehicle coordinates;
means for sending vehicle coordinates and the entered voice instructions to a
server over a network;

means for generating a trip plan according to navigation information stored in a
memory associated with the server, the vehicle coordinates, and the trip voice
25 instructions, wherein the generated trip plan includes a table of locations of
the trip plan with associated one or more identifiers;

means for sending the generated trip plan table to the vehicle over the network;

means for comparing present vehicle coordinates to the trip plan table;

if, according to the comparison, the present vehicle coordinates are within a
30 threshold value from a location in the table, means for retrieving one or more
voice prompts previously stored at the vehicle, wherein the one or more
retrieved voice prompts correspond to the one or more identifiers associated
with the location in the table within the threshold value from the present
vehicle coordinates; and

35 means for presenting the retrieved one or more voice prompts.

21. A vehicle navigation apparatus comprising:

means for initiating a trip request;

means for entering trip voice instructions;

means for determining vehicle coordinates;

5 means for sending vehicle coordinates and the entered voice instructions to a server over a network;

means for generating a trip plan according to navigation information stored in a memory associated with the server, the vehicle coordinates, and the trip voice instructions, wherein the generated trip plan includes a table of locations of the trip plan with associated voice prompts;

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means for sending the generated trip plan table to the vehicle over the network;

means for comparing present vehicle coordinates to the trip plan table; and

if, according to the comparison, the vehicle coordinates are within a threshold value from a location in the table, means for presenting the voice prompt associated with the location in the table that is within the threshold value of the vehicle's location.

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